

ABSTRACT

An improved method and apparatus for physical strength, agility and endurance training uses fluid jet reaction forces to train and strengthen muscles. The device for physical training includes a source of pressurized fluid connectable through a hose to a propulsion system and one or more apertures or nozzles for forming one or more jets of fluid that are discharged from the propulsion system such that a nozzle reaction force, acting in a direction opposite the direction of the jet stream, is exerted on the jet propulsion system. Fluid can also be delivered through a curved tube or passage in the propulsion system such that a stream of fluid that is discharged from the propulsion system is not traveling in the same direction as it was before it was discharged such that the change in direction of the fluid causes a change in the momentum of the fluid for exerting an additional reaction force on the propulsion system. A user engaging mechanism, connected to the propulsion system, is configured to transmit exercise forces to a user. The device includes controls for controlling the magnitude and direction of the reaction force vector applied to the user engaging mechanism. Various embodiments of user engaging members, including blocking dummies, handles, gloves, helmets, shoes, straps or balls, may be attached to the propulsion system.